

Hurricanes and Retail Fuel Prices

When hurricanes disrupt power and refinery production on the Gulf Coast, shortages of gasoline and other petroleum products can develop more than a thousand miles away.

-U.S. Energy Information Administration, "[This Week in Petroleum](#)," August 5, 2009

Why Gulf Hurricanes Affect Other Fuel Markets

The Gulf Coast receives approximately 44% of the imports that enter the United States each day, according to the U.S. Energy Information Administration (EIA). In addition, the region is responsible for about 29% of domestic oil production. When a hurricane affects the Gulf, it has the potential to disrupt a huge segment of the U.S. crude oil market.

Furthermore, refineries located in Texas and Louisiana along the Gulf Coast represent 42% of U.S. refining capacity. This region distributes significant quantities of finished motor gasoline and diesel fuel to the other regions of the country via pipelines that originate in the Gulf Coast region. In 2010, nearly 11% of the finished motor gasoline consumed in the U.S. was distributed from this region to other parts of the country. (For details on product distribution throughout the U.S., visit nacsonline.com/gasprices)

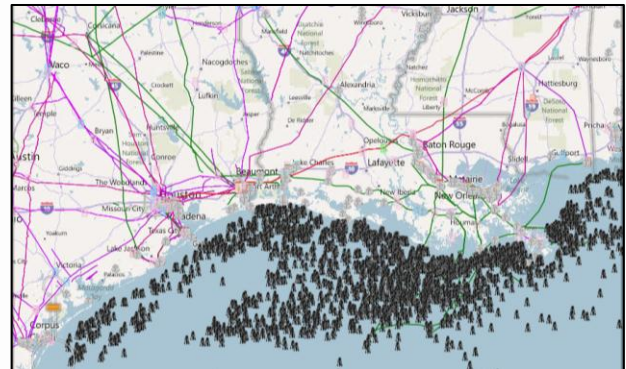
When a hurricane hits the Gulf Coast, in addition to potentially disrupting crude oil production, import delivery and refinery operations, it can take pipelines out of service for a period of time. First, there is the temporary shutdown during the hurricane and the resulting loss of power to the pumping stations. Second, pipelines must remain full to prevent the mixing of products. Without refinery production keeping supplies steady, pipelines must slow down deliveries, creating temporary shortages at terminals along their delivery route.

Retail Fuel Prices Respond to Disruptions

Following a natural disaster such as a hurricane, understandably significant attention is placed on the retail price of gasoline and diesel fuel.

Supply outages, or even potential outages, can result in changes in the wholesale price of fuel that is quickly reflected at the local convenience store. This is often misinterpreted as the retailer seeking to profit — or “price gouge” — from the situation.

The fact is that retailers have very little control over the prices they post at their locations. According to the Oil Price Information Service



Gulf Coast Petroleum Infrastructure

(OPIS), the retail markup (the difference between the wholesale cost of the fuel and the retail price charged) was only 16.6 cents per gallon in 2010, or 5.9% of the retail price of gasoline. After factoring the costs associated with selling fuel, the average pre-tax profit per gallon for a retailer in 2010 was approximately 2 cents to 4 cents. (For more information about contributing factors to the retail price of fuel and retailer pricing decisions, go to nacsonline.com/gasprices.)

When disruptions occur, retailers (many of whom receive multiple shipments each day) are susceptible to changes in product availability and volatile wholesale prices. During disasters, they receive frequent updates from their suppliers alerting them to changes in wholesale

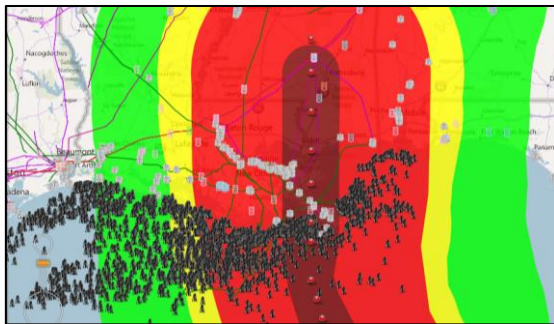
prices and limitations on fuel supplies in their regions. Retailers selling the brand of their supplier may incur price increases and be limited in their access to fuel. Unbranded retailers, however, will experience the most dramatic price increases and may in fact be denied access to volume because the refiners focus on satisfying their contractual obligations first. In either case, retail prices react.

Past Experience Helps Explain Market Behavior

While it is impossible to predict what could happen to market conditions and retail prices, evaluating the experiences from past supply disruptions is instructive. Below are some facts about how the market has reacted to two major Gulf Coast hurricanes:

Hurricane Katrina

After Katrina made landfall on August 29, 2005, Gulf oil production was down more than 88% and 10% of the nation's refining infrastructure was off-line. The major pipelines originating in the area (Colonial and Plantation) were inoperable until early September, and then only at partial capacity. Owners of wholesale terminal and storage facilities were uncertain when they would receive additional supplies.



Hurricane Katrina

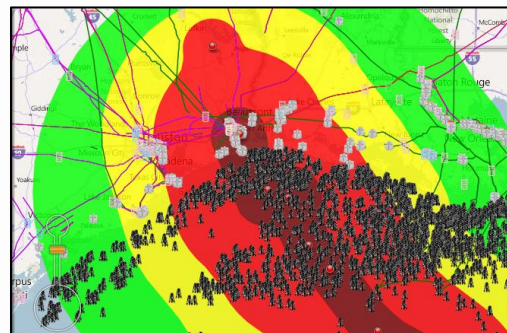
As a result of limited supplies and continue demand, wholesale prices increased. Some retailers reported wholesale price increases of up to \$1.00 per gallon overnight, forcing them to increase their retail prices in response.

However, competition did not allow them to fully recover their increased costs, resulting in lower margins and sometimes losses on each gallon sold.

According to OPIS, the week after the hurricane, the national average wholesale price for gasoline increased 19.6%, but retail price increased only 13.6%.

Hurricane Rita

When Rita struck the Gulf Coast on September 23, 2005, operations were still interrupted due



Hurricane Rita

to Katrina and about 5% of refining capacity remained offline. The second hurricane shut down another 10% of refining capacity. The market was protected somewhat by higher-than average product inventories in storage, which provided some time for the refineries to come back online. Still, that week wholesale prices nationwide jumped 9.5% and retail prices followed at 4.5%.